# DESCRIPTION OF TWO NEW SPECIES OF THE GENUS *PLECTRONE* WALLACE FROM SUMATRA AND SIMEULUË (COLEOPTERA, CETONIIDAE)

by

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With 18 text-figures

ABSTRACT

Two new species of the genus *Plectrone* Wallace are described and figured, viz., *P. sumatrana* from Sumatra and *P. brongersmai* from Simeuluë. The genus *Plectrone* now comprises six species.

Going through the collection of Cetoniidae in the Leiden museum, I found two new species of the genus *Plectrone* Wallace. It appears that all specimens determined as *Plectrone tristis* Westwood from Sumatra and Simeuluë belong to the species here described.

**Plectrone sumatrana** spec. nov.

(figs. 1, 3-11)

Male (holotype). — Length without head 29.5 mm, width at shoulders 13.5 mm. Dark green, faintly shiny; tips, margins and sutures of several elements of underside brownish; setae brown. Entire surface doubly punctate; secondary punctation dense.

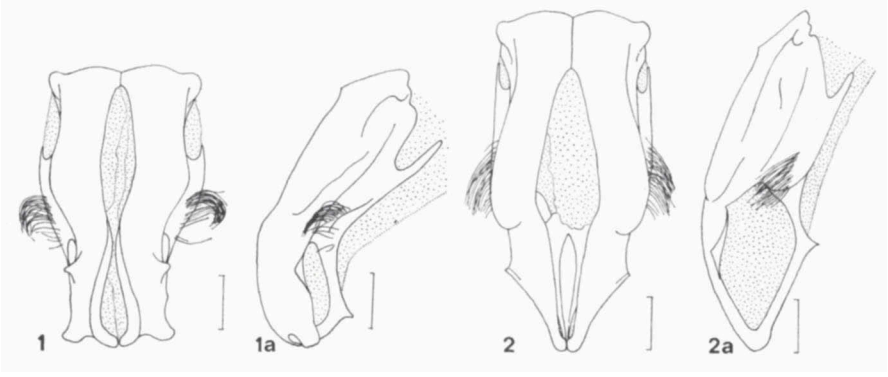
Head (fig. 3). Clypeus between lateral ridges much widened towards apex, slightly bilobed; anterior margin raised; impressions adjacent to lateral ridges with short longitudinal striolae, apico-laterally with longitudinally elongated annulate punctures; middle portion of clypeus apically with simple primary punctures of variant size; lateral sides longitudinally striolate. Maximum length of head 6.4 mm, maximum width 4.3 mm; ratio l/w 1.49.

Pronotum (fig. 4): lateral borders marginate, angulate in apical two thirds; traces of median longitudinal impression present; disc, especially on apical half, with scattered primary punctures; lateral sides transversely striolate. Median length of pronotum 9.0, maximum width 8.7 mm; ratio l/w 1.03.

Scutellum (fig. 5): base with short transverse striolae; apical half with one (left), two (right) longitudinal striolae.

Elytron (fig. 5): apical margin behind apical tubercle towards suture slightly sinuated; suture pointed at apex; juxtasutural costa distinct behind

anterior margin of large impression adjacent to suture on middle of disc; apical tubercle apically protruding; disc with scattered primary punctures; discal impression with longitudinally to obliquely directed striolation; disc along juxtasutural costa from discal impression to apex extendingly striolate; lateral sides transversely striolate. Distance from scutellar apex to imaginary line connecting elytral apices 14.9 mm; maximum length of right elytron



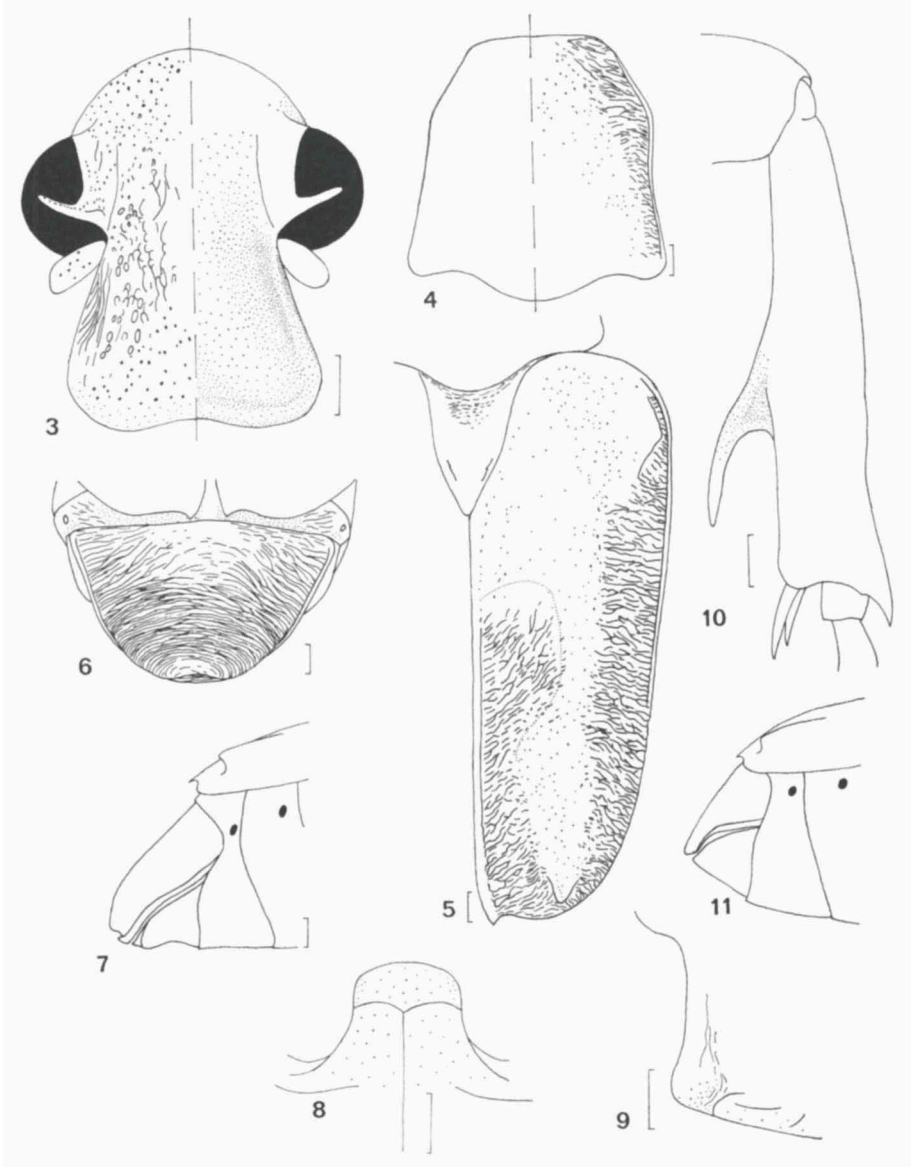

Figs. 1-2. Parameres of: 1, *Plectrone sumatrana* spec. nov.; 2, *P. brongersmai* spec. nov. 1, 2, full-face, 1a, 2a, lateral view. Scale-lines = 1 mm.

19.9 mm, width of elytra combined 13.5 mm, their ratio 1.45.

Pygidium (figs. 6, 7) large; margins laterally slightly sinuated; lateral sides and apex marginated; along apical emargination narrowly impressed; transversely striolate, laterally striolation slightly curved to behind, near apex with concentric striolation.

Mesosternum with some longitudinal striolae on both sides of base of meta-mesosternal process (fig. 9). Mesepisternum with longitudinally to obliquely directed striolae. Metasternum with distinct, brownish, very slightly impressed median line; disc on anterior half with scattered fine primary punctures; along anterior margin with some transverse striolae. Meta-mesosternal process (figs. 8, 9) strongly transverse, scarcely protruding; apex in lateral view rounded (fig. 9); suture between meta- and mesosternal parts distinct, brownish. Metepisternum, especially towards lateral emargination, with scattered transverse striolae.

Abdomen ventrally with median longitudinal impression. First visible ventral segment laterally, especially anteriorly, transversely striolate; middle portion with a transverse row of fine primary punctures, these punctures provided with a short seta. Second to fifth visible segments with a similar row; laterally provided with short transverse striolae and transversely elongated punctures. Last ventral segment towards middle transversely impressed




Figs. 3-11. *Plectrone sumatrana* spec. nov.; 3-10, ♂ holotype; 11, ♀ allotype. 3, head, left half with striolation and primary punctation, right half with structure; 4, pronotum; 5, scutellum and right elytron, dotted line indicates margin of discal impression; 6, pygidium, dorso-caudal view; 7, do., lateral view; 8, meta-mesosternal process; 9, do., lateral view; 10, left posterior tibia; 11 pygidium, lateral view. Scale-lines = 1 mm.

(fig. 7); sides with short transverse striolae; surface of anal margin uneven, light brown.

Anterior and intermediate tibiae on outer margin with one apical tooth only. Posterior tibia (fig. 10) on inner margin with a long appendage, base about as long as free apical part; outer margin with one apical tooth, trace of second one.

Parameres as in fig. 1.

Variation. — Length without head 29.5-29.7 mm, width at shoulders 13.5-13.8 mm. No taxonomically noteworthy differences in second male at hand.

Female (allotype). — Length without head 29.8 mm, width at shoulders 15.0 mm. Dark to blackish green. Striolation and primary punctation more coarse than in males. Clypeus between lateral ridges slightly widened towards apex; anterior margin thickened. Maximum length of head 6.0 mm, maximum width 4.2 mm; ratio l/w 1.43. Median length of pronotum 10.2 mm, maximum width 10.2 mm; ratio l/w 1.00. Distance from scutellar apex to imaginary line connecting elytral apices 14.5 mm; maximum length of right elytron 19.6 mm, width of elytra combined 15.0 mm, their ratio 1.30. Pygidium (fig. 11) with incomplete emargination; apex abruptly curved towards last ventral segment; transversely striolate, near apex with concentric striolation. Abdomen ventrally without median longitudinal impression. Anterior tibia with three teeth on outer margin; intermediate tibia with two distinct apical teeth; posterior tibia with three apical teeth, base of outer two fused, inner margin without appendage.

Variation. — Length without head 27.0-32.0 mm, width at shoulders 12.5-15.0 mm. Metallic green, dark blackish green, or black with traces of green, then underside brownish. Elytra in some specimens slightly narrower; density of striolation variable. Striolae of pygidium occasionally provided with short setae.

Material examined. — 2 males, 6 females (Leiden museum).

Holotype labelled as follows: 'Dolok Baros Sumatra', 'Museum Leiden verz. [collection] J. J. de Vos tot Nederveen Cappel', 'det. Moser', 'Museum Leiden *Plectrone tristis* var. *olivacea* Schoch'. One paratype from Deli, Sumatra. Allotype labelled as holotype. Five paratypes: two from 'Palembang, Mana Riang'; one from 'Palembang: Bovenland' [P. highlands]; one from 'Palembang, Padang Oelak, Tanding'; one with the locality 'Sumatra'.

Diagnostic characters. Generic, after Ritsema (1889) and Mikšić (1970): clypeus apically raised [apical margin in females thickened]; sides of pronotum marginated; elytra with large discal impressions; intermediate tibiae in females bicuspidate; posterior tibiae in males with appendage. Specific:

secondary punctation dense; integument faintly shiny; traces of median longitudinal impression of pronotum present; appendage on inner margin of posterior tibiae in males towards apex parallel with tibial axis, base about as long as free apical part; shape of parameres (fig. 1).

Remarks. — The shape of the parameres of *Plectrone sumatrana* may be regarded as a derived form of those of *P. tristis* Westwood from Java and *P. polita* Janson from Nias. With regard to the shape of the appendage on the posterior tibiae in the males *P. sumatrana* is closely related to *P. tristis*.

**Plectrone brongersmai** spec. nov.

(figs. 2, 12-18)

Male (holotype). — Length without head 27.3 mm, width at shoulders 13.0 mm. Black, shiny; underside brownish; setae brown. Entire surface doubly punctate; secondary punctation dense, fine, shallow.

Head (fig. 12). Clypeus between lateral ridges widened towards apex; anteriorly bilobed; anterior margin strongly raised; impressions adjacent to lateral ridges with longitudinal, somewhat reticulately arranged, striolae, apically with annulate punctures; middle portion of clypeus with simple primary punctures of variant size; lateral sides longitudinally striolate. Maximum length of head 5.8 mm, maximum width 3.8 mm; ratio l/w 1.53.

Pronotum (fig. 13) : lateral borders somewhat more acutely angulate than in *P. sumatrana*; median longitudinal impression complete; emargination of lateral borders apically obsolete; disc with scattered fine primary punctures; lateral sides with transversely to obliquely directed striolae. Median length of pronotum 8.9 mm, maximum width 8.2 mm; ratio l/w 1.06.

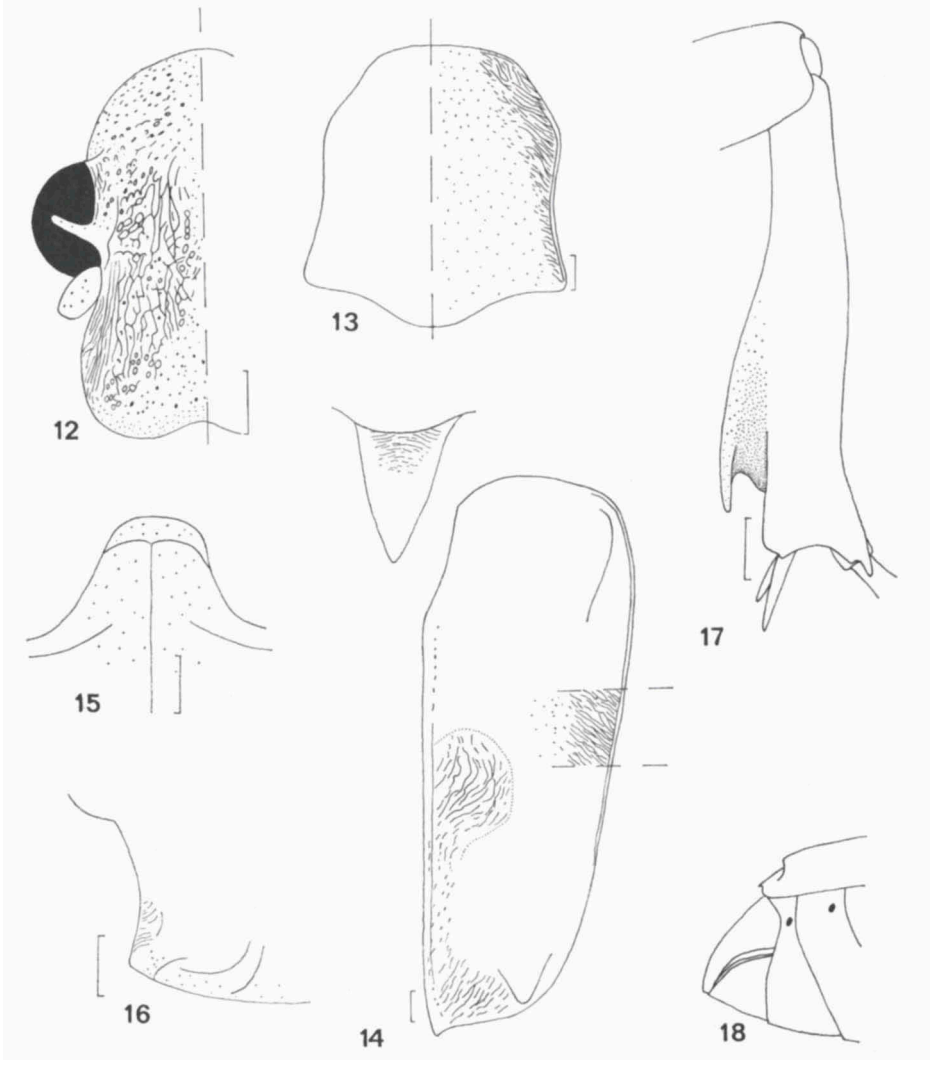
Scutellum (fig. 14) with a slight median longitudinal impression; basally transversely striolate.

Elytron (fig. 14): suture pointed at apex; juxtasutural costa distinct from somewhat basally of discal impression to apex, obsolete near scutellum; disc with scattered fine primary punctures; discal impression with obliquely to longitudinally directed striolae; disc along juxtasutural costa from discal impression to somewhat before apex provided with short striolae; lateral sides with fine transversely to obliquely directed striolae. Distance from scutellar apex to imaginary line connecting elytral apices 13.0 mm; maximum length of right elytron 17.9 mm, width of elytra combined 13.0 mm, their ratio 1.38.

Pygidium much damaged, structural characters lost; striolation fine.

Mesosternum: base of meta-mesosternal process finely transversely striolate (fig. 16). Mesepisternum with fine longitudinally to obliquely directed striolae. Metasternum with distinct, slightly impressed, median line; anterior half on both sides of meta-mesosternal process, especially laterally, finely

transversely striolate. Meta-mesosternal process (figs. 15, 16) from base on narrowed towards apex, slightly protruding, entirely curved towards the body; apex in lateral view abruptly curved inwards (fig. 16); suture between meta- and mesosternal parts distinct. Metepisternum finely transversely striolate.




Figs. 12-18. *Plectrone brongersmai* spec. nov.; 12-17, ♂ holotype; 18, ♀ allotype. 12, left half of head; 13, pronotum; 14, scutellum and right elytron, dotted line indicates margin of discal impression; 15, meta-mesosternal process; 16, do., lateral view; 17, left posterior tibia; 18, pygidium, lateral view. Scale-lines = 1 mm.

Abdomen ventrally with median longitudinal impression. Ventral segments laterally very finely striolate; middle portion with scattered fine primary punctures. Last ventral segment transversely impressed; anal margin dark brown.

Anterior and intermediate tibiae on outer margin with one apical tooth only. Posterior tibia (fig. 17): base of appendage on inner margin much longer than free apical part; appendage apically strongly curved away from tibial axis; outer margin with one apical tooth, second one distinctly traced; inner margin with trace of one apical tooth.

Parameres as in fig. 2.

Female (allotype). — Length without head 25.5 mm, width at shoulders 12.1 mm. Black, underside with traces of dark brown, shiny. Secondary punctation very fine, shallow. Striolation and primary punctation somewhat more coarse than in male. Clypeus between lateral ridges slightly widened towards apex; anterior margin thickened; impressions adjacent to lateral ridges with longitudinally elongated punctures and somewhat reticulately arranged striolae near antennal sockets. Maximum length of head 5.2 mm, maximum width 3.7 mm; ratio l/w 1.41. Median length of pronotum 8.4 mm, maximum width 8.2 mm; ratio l/w 1.02. Elytron: apical margin behind apical tubercles towards suture slightly sinuated; juxtasutural costa distinct from somewhat behind anterior margin of discal impression to near apex. Distance from scutellar apex to imaginary line connecting elytral apices 11.8 mm; maximum length of right elytron 17.4 mm, width of elytra combined 12.4 mm, their ratio 1.40. Pygidium (fig. 18): emargination apically obsolete; apex strongly curved towards last ventral segment; transversely striolate, near apex with concentric striolation. Abdomen ventrally without median longitudinal impression. Second to fifth visible ventral segments on posterior half with an irregular row of primary punctures; laterally with transverse striolation. Last ventral segment transversely striolate. Anterior tibia on outer margin with three teeth; intermediate tibia with two distinct apical teeth. Posterior tibia with three apical teeth, base of outer two largely fused; inner margin without appendage.

Material examined. — 1 male, 1 female (Leiden museum).

Holotype labelled as follows: 'Edw. Jacobson Sinabang Sima Iur. Sum. 3. 1913', 'Coll. Veth', 'Museum Leiden *Plectrone tristis* Det. Westw.', 'Cat. No. 6'. Allotype labelled as holotype, except: '... 2. 1913', 'Cat. No. 7'.

Diagnostic characters. Generic, see *P. sumatrana*. Specific: secondary punctation fine, shallow, integument shiny; median longitudinal impression of pronotum complete; appendage on inner margin of posterior tibia in males towards apex in lateral view parallel with tibial axis, base much longer than

free apical part; apical part of appendage strongly curved away from tibial axis.

Remarks. — As to the shape of the parameres *Plectrone brongersmai* is similar to *P. tristis* Westwood from Java and *P. polita* Janson from Nias. With regard to the shape of the appendage on the posterior tibia in the males, *P. brongersmai* is closely related to *P. polita*.

This new species is named in honour of Prof. Dr. L. D. Brongersma, retiring Director of the Rijksmuseum van Natuurlijke Historie, Leiden.

## References

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